

**REMARKS**

Claims 14-18, 39-41, 49, 50 and 54-65 are pending. By this Amendment, claims 14, 16 and 39 are amended to clarify the features recited and claims 15, 17, 18, 40, 41, 49, 50 and 54 are amended for agreement with their respective independent claims. Claims 55-65 are added. Support for the amendment of claims 14, 16 and 39, and the addition of claims 55-65 can be found throughout Applicant's specification. Thus, no new matter is added. Non-elected claims 1-13, 19-38, 42-48 and 51-53 are canceled without prejudice to the subject matter they recite. Reconsideration of the application based on the above amendments and following remarks is respectfully requested.

The courtesies extended by Examiner Kim to Applicant's representative during the telephone interview held February 18, 2010, are appreciated. During the interview, it was agreed that the above amendment of claim 16 overcomes the rejections. Examiner Kim indicated that he requires additional time to consider the arguments presented below regarding claims 14 and 39.

Applicant notes with appreciation the identification of allowable subject matter in claims 15, 17, 18, 40 and 41. Applicant respectfully submits that all pending claims are in condition for allowance as detailed below.

Claims 16 and 50 are rejected under 35 U.S.C. §102(b) over Vogel, U.S. Patent Application Publication No. 2004/0257544. The rejection is respectfully traversed.

Vogel fails to disclose a magnitude of a velocity of movement of the substrate stage differs depending on a direction of movement of the substrate stage from a first position to a second position when the substrate stage is moved substantially linearly from the first position to the second position in a state in which a liquid immersion area is locally formed on the substrate stage by using the liquid supply system and the liquid recovery system, as recited in claim 16.

In rejecting Applicant's claims, the Office Action notes that velocity is defined in terms of speed and direction, by definition, and that every time the direction of the movement of the stage changes from left to right, the velocity is changed. See Office Action, page 3, lines 6-8. Vogel discloses a liquid immersion photolithographic system that provides a plurality of micronozzles arranged around the periphery of the projection area to provide a uniform velocity distribution of the liquid flow. See Abstract. Vogel does not disclose varying a magnitude of the velocity of the stage based on the direction of movement of the substrate stage as recited in claim 16. Thus, Vogel fails to disclose each and every feature recited in claim 16. Accordingly, Vogel fails to disclose each and every feature recited in claim 50 for at least the dependence of claim 50 on claim 16 and for the separately patentable features that claim 50 recites. Withdrawal of the rejection is respectfully requested.

Claims 14, 39, 49 and 54 are rejected under 35 U.S.C. §103(a) over Makinouchi, U.S. Patent No. 5,699,145, in view of Vogel. The rejection is respectfully traversed.

Makinouchi in view of Vogel would not have rendered obvious a magnitude of a velocity of movement of the substrate stage differs depending on a distance between a first position and a second position when the substrate stage is moved substantially linearly from the first position to the second position in a state in which a liquid immersion area is locally formed on the substrate stage by using the liquid supply system and the liquid recovery system as recited in claim 14, and adjusting a magnitude of a velocity of movement of the substrate from the first position to the second position depending on a positional relationship between the first position and the second position, as recited in claim 39.

Makinouchi discloses a scanning type exposure apparatus including a mask stage which can move a mask along a predetermined scanning direction and a substrate stage which can move a substrate. See Abstract. Makinouchi discloses that recticle 12 is disposed on a fine movement stage 11, which is atop a rough movement stage 10. See col. 10, lines 16-38

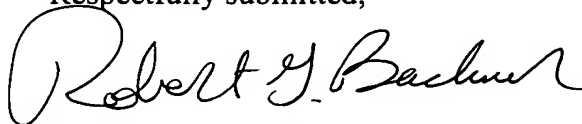
and Figs. 1 and 2B. Wafer 5 is disposed on ZL stage 4, which is atop X stage 3, which is atop Y stage 2, which is atop support table 1. See col. 7, lines 39-55 and Fig. 1. The calculation of the scanning speed is explained in detail at col. 9, line 30 - col. 10, line 35 and Fig. 3. In calculating the scanning speed, Makinouchi does not take into account a distance between a first position and a second position. Makinouchi sets a target scanning speed  $V_{RF}$  of the Y stage 2 (the wafer 5) based on the position of the fine movement stage 11 (the recticle 12), such that the difference between the position of the fine movement stage 11 (the recticle 12) and the Y stage 2 (the wafer 5) is zero. See col. 10, lines 42-48. That is, Makinouchi does not differ a velocity of the wafer 5 depending on a distance that the wafer 5 is to be moved. Vogel fails to overcome the deficiencies of Makinouchi explained above regarding claims 14 and 39. Thus, Makinouchi in view of Vogel would not have rendered obvious the combinations of features recited in claims 14 and 39. Accordingly, Makinouchi in view of Vogel would not have rendered obvious the combinations of features recited in claims 49 and 54 for at least the dependence of claims 49 and 54 on claims 14 and 39 and for the separately patentable features that these claims recite. Withdrawal of the rejection is respectfully requested.

Added dependent claims 55-65 also are patentable over the applied references for at least their dependence on their respective independent claims, and for the separately patentable features that these claims recite.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Petition for Extension of Time

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